=> d his

(FILE 'HOME' ENTERED AT 08:39:38 ON 30 JUN 2003)
FILE 'REGISTRY' ENTERED AT 08:39:52 ON 30 JUN 2003
L1 1 S BROMINE/CN
L2 605 S BROMATE
L3 409 S L2 NOT(SILVER OR ESTER OR COMPD OR HEXA? OR PHOSP? OR HYDROXIDE)
L4 206 S L3 NOT(BIS OR METH? OR WITH OR CHLOR? OR DIIOD? OR TRIMETH? IR DICHLOR?)
L5 192 S L4 NOT(DIPERBRO? OR LANTHANUM OR NEODYMIUM OR LUTETIUM OR SCANDIUM OR LEAD OR CURIUM)
L6 146 S L5 NOT(GALLIUM OR TETRAFLUO? OR HYDRAZ? OR OXO? OR PERBROMATO OR ARG? OR NICKEL OR DIETH? OR BROMOPRO? OR BROMOFL?)
L7 124 S L6 NOT(ERBIUM OR GADOL? OR DIFLUO? OR ETH? OR FRANC? OR RADIUM OR BROMOC? OR BROMOF? OR SILICATE OR ALUMIN?)
L8 93 S L7 NOT(TRIPHEN? OR PHENY? OR TRIAZ? OR YTTER? OR THAL? OR HOLM? OR CERIUM OR DYSP? OR STRON? OR SAMAR? OR NITRYL? OR MERCUR?)
L9 40 S L8 NOT(MAGN? OR COBALT? OR BARIUM OR TERB? OR CYAN? OR CAD? OR THUL? OR EUROP? OR THIO? OR PRAS? OR ZINC OR BROMOI? OR CALC? OR COP? OR FLUORO? OR RUB? OR PENT? OR BROMINE? OR NITRO?)
L10 29 S L9 NOT(PHEN? OR OCTA? OR BUTA? OR CES? OR BROMITO OR BROMOHY? OR YTT? OR HYDRO OR SULFATE)
L11 12 S L10 AND SALT
SEL NAME L1
SEL NAME L11
FILE 'CA' ENTERED AT 09:18:36 ON 30 JUN 2003
L12 58474 S L1 OR L10 OR E1-27 OR KBRO3 OR NABRO3 OR NH4BRO3
L13 8200 S BROMATE
L14 8231 S L12-13(5A)(DETECT? OR DETERMIN? OR MEASUR? OR MONITOR? OR ASSAY? OR ANALY? OR ASSES? OR CHECK? OR TEST? OR ESTIMAT? OR EVALUAT? OR EXAMIN? OR SENSE# OR SENSING OR IDENTIF? OR QUANTITAT? OR QUANTIF?)
L15 6 S L12-13(10A)ADULT?
L16 99 S L14(10A)(URINE OR SERUM OR SALIVA OR BLOODGASTRIC OR SPINAL OR SWEAT)
L17 172 S L14 AND(TEST OR ANALYTICAL)(1A)(STRIP OR PAD OR ELEMENT OR PAPER)
L18 158 S L17 NOT PY>2001
L19 257 S L15-16,L18

=> d bib,ab 1-257 l19

L19 ANSWER 2 OF 257 CA COPYRIGHT 2003 ACS
AN 138:233339 CA
TI Method for **detection** of **bromine** in **urine** using liquid chemistry dry chemistry test pads and lateral flow
IN Smith, Jack V.
PA Sciteck Diagnostics, Inc., USA
SO U.S., 13 pp.
PI US 6537823 B1 20030325 US 2000-556395 20000424
PRAI US 2000-556395 20000424
AB This invention is in the field of toxicol. and clin. diagnostics. More specifically, this invention provides a single dry chem., liq. chem., or lateral flow dry chem. combination test device for use in the detection of **adulteration** by the addn. of **bromine**(s) to a specimen submitted for drugs of abuse (DAU) testing and clin. diagnostic purposes in aq. fluids, including urine, saliva, serum, blood, sweat exts., and liq. homogenates of hair.

L19 ANSWER 34 OF 257 CA COPYRIGHT 2003 ACS

AN 133:28176 CA
TI Spectrophotometric determination of iodine by iodine starch method in urine samples after alkaline ashing
AU Divrikli, Umit; Soylak, Mustafa; Dogan, Mehmet
CS Erciyes Universitesi, Fen-Edebiyat Fakultesi, Kayseri, 38039, Turk.
SO Chemia Analityczna (Warsaw) (2000), 45(2), 257-264
AB A spectrophotometric method is proposed for the detn. of iodine in urine samples. Destruction of the org. matter of urine by alk. ashing with KOH is carried out prior to detn. of iodine by the iodine-starch method. The influence of components of urine, as interferents, was discussed. The iodine contents of the urine samples collected from adults from Kayseri (Turkey) were detd. by using the proposed method. The method was also applied for the detn. of iodine in drinking water samples. The relative std. deviations of the iodine detns. were less than 10%. The detection

L19 ANSWER 76 OF 257 CA COPYRIGHT 2003 ACS
AN 127:85173 CA
TI Biological monitoring of workers' exposure to bromine
AU Eldan, Michal; Carel, Rafael S.; Factor-Litvak, Pam; Goldsmith, John R.; Weitzman, Simon
CS Department of Epidemiology, Ben-Gurion University of the Negev, Beer Sheva, 84105, Israel
SO Journal of Occupational and Environmental Medicine (1996), 38(10), 1026-1031
AB The use of serum bromine (referring to any form of Br) concn. (SeBr) as a measure of exposure was examd. in an occupational cohort. Assocns. with work site, department type, chem. handling, and occupation, as proxy measures of exposure, were studied. SeBr was assocd. with all of these measures. SeBr was also assocd. with various demog. characteristics (age, country of origin, and education) in men. In women, there was no assocn. between SeBr and age, country of origin, or education. The use of SeBr as a measure of exposure is discussed. The conclusion is that exposure to bromine can be assessed by regular monitoring of SeBr.

L19 ANSWER 79 OF 257 CA COPYRIGHT 2003 ACS
AN 126:301201 CA
TI Direct reading chemical **test strip** for aqueous solutions
IN Douglas, Joel S.; Drexler, Karen R.
PA Mercury Diagnostics Inc., USA
SO PCT Int. Appl., 22 pp.
PI WO 9712242 A1 19970403 WO 1996-US15473 19960925
PRAI US 1995-534623 19950927
AB A chem. **test strip** is described that is comprised of a support layer, a first assay area, a second assay area, and a hydrophobic zone positioned between the first assay area and the second assay urea. The first and second assay areas are attached to the support layer and comprise an absorbent matrix. The first assay area includes a first test reagent absorbed in its matrix that changes color in response to a first concn. of an analyte such as free available Cl. The second assay area includes a second test reagent absorbed in its matrix that changes color in response to a second concn. of the analyte. Interpretation of the **test strip** can be facilitated by printing information on the assay areas which is more visible after the color change than before the color change. An example describes a **test strip** for the detection of Cl in an aq. sample such as pool or hot tub water by using 3,5,3',5'- tetramethylbenzidine and syringaldazine as color reagents that can detect different concns. of Cl on the same strip.

L19 ANSWER 102 OF 257 CA COPYRIGHT 2003 ACS
AN 119:66953 CA
TI Fast and simple routine **determination** of **bromine** by XRF in wet blood **serum** microsamples. Evaluation of errors
AU Shenberg, C.; Gilat, J.; Mantel, M.
CS Soreq Nucl. Res. Cent., Yavne, 70600, Israel
SO Advances in X-Ray Analysis (1992), 35B, 1175-82
AB The title method is based on excitation with a Mo x-ray tube and detection of the fluorescent Br K x-rays with a Si(Li) detector. Serum microsamples (300 μL) are counted directly, without drying, for 100 s. The detection limit obtained under these conditions is 0.6 ppm Br. The overall precision of the method was ±3.1%. The different parameters that contribute to the total error of the method were studied. A survey of Br concns. in blood serum of industrial workers exposed to Br compds. was carried out.

L19 ANSWER 118 OF 257 CA COPYRIGHT 2003 ACS
AN 114:20443 CA
TI **Determination** of **bromine** in human **serum** by inductively coupled plasma-mass spectrometry
AU Vandecasteele, C.; Vanhoe, H.; Dams, R.; Versieck, J.
CS Lab. Anal. Chem., Rijksuniv. Gent, Ghent, B-9000, Belg.
SO Analytical Letters (1990), 23(10), 1827-41
AB The **detn.** of **bromine** in human **serum** by inductively coupled plasma-mass spectrometry (ICP-MS) is discussed. Sample prepn. was kept as limited as possible: serum samples were only dild. with nitric acid (five- or ten-fold). Indium was added as internal std. To avoid overlap of 40Ar40Ar with 79Br and 81Br, the width of the peak at 5% of the max. was set at 0.61 u. The interference from S with 81Br was studied and shown to be negligible. The result obtained by ICP-MS for a second-generation biol. ref. material (freeze dried human serum), 47.2 μg/g with a std. deviation of 1.2 μg/g, is in good agreement with results obtained by other anal. techniques. In addn., the results obtained by using 79Br and 81Br are in excellent agreement with each other.

L19 ANSWER 120 OF 257 CA COPYRIGHT 2003 ACS
AN 113:55277 CA
TI **Determination** of iodine and **bromine** in plasma and **urine** by inductively coupled plasma mass spectrometry
AU Allain, Pierre; Mauras, Yves; Douge, Christophe; Jaunault, Laurent; Delaporte, Thierry; Beaugrand, Claude
CS Lab. Pharmacol., Cent. Hosp. Univ., Angers, 49033, Fr.
SO Analyst (Cambridge, United Kingdom) (1990), 115(6), 813-15
AB The simultaneous detn. of I and Br in plasma and urine by inductively coupled plasma mass spectrometry, using a Nermag prototype instrument, is described. The sample prepn. involves only a 10-fold diluent contg. Eu as an internal std. followed by direct nebulization in the plasma. The I, Br, and Eu ions are measured at m/z = 127, 79, and 153, resp. The sensitivity of the method, with detection limits of 1.6 and 52 μg L-1 for I and Br, resp., is satisfactory for clin. applications. The calibration graphs were linear over the ranges 0-400 μg I-1 and 0-40 mg L-1 for I and Br, resp., which are wide enough for most assays. The recoveries were close to 100% with coeffs. of variation of less than 3%. The within-day and between-day reproducibility was about 5%. The concns. of I and Br in the plasma of 26 healthy individuals were 58 and 4.1 mg L-1, resp. The amts. of I and Br eliminated in urine were 94 μg per 24 h (range 27-403 mg per 24 h) and 3.6 mg per 24 h, resp. These results are in agreement with reported values.

L19 ANSWER 134 OF 257 CA COPYRIGHT 2003 ACS

AN 111:72605 CA
TI **Determination** of **bromine** in **urine** by x-ray fluorescence
AU Abuku, Shinichi; Tanaka, Shigeru; Seki, Yukio; Imamiya, Shunichiro
CS Sch. Hyg. Sci., Kitasato Univ., Sagamihara, 228, Japan
SO Igaku to Seibutsugaku (1989), 118(3), 215-19
LA Japanese
AB Urinary Br- was detd. by the title method with correction for background fluorescence without preliminary purifn. The mean ± SD concn. was 12.1 ± 6.9 mg/L in 122 exterminators using MeBr and significantly higher than the concn. of 6.3 ± 2.7 mg/L in 103 controls.

L19 ANSWER 140 OF 257 CA COPYRIGHT 2003 ACS
AN 108:201328 CA
TI Determination of the extracellular fluid volume
IN Zaichik, V. E.
PA Institute of Medical Radiology, Academy of Medical Sciences, U.S.S.R., USSR
SO U.S.S.R. From: Otkrytiya, Izobret. 1988, (8), 155.
PI SU 1377739 A1 19880228 SU 1985-3984517 19851128
PRAI SU 1985-3984517 19851128
AB The extracellular fluid vol. is detd. by administering stable Br as an indicator and measuring its excretion in saliva and urine before and ≥1 day after its administration and applying a formula (which is given) to the results.

L19 ANSWER 141 OF 257 CA COPYRIGHT 2003 ACS
AN 108:146523 CA
TI Measurement of stable isotopes of bromine in biological fluids with inductively coupled plasma mass spectrometry
AU Janghorbani, Morteza; Davis, Terri A.; Ting, Bill T. G.
CS Dep. Med., Univ. Chicago, Chicago, IL, 60637, USA
SO Analyst (Cambridge, United Kingdom) (1988), 113(3), 405-11
AB A method is reported for the accurate measurement of the two stable isotopes of bromine in biol. fluids of interest in human metabolic studies. The method is based on inductively coupled plasma mass spectrometry (ICP-MS). It is shown that the background ion beam intensities at m/z = 79 and 81 are typically in the range 70-335 and 600-7200 ions/s, resp., when de-ionized water is aspirated into the plasma. The corresponding range for 1.0 μg/mL of natural Br is 9700-18,500 ions/s at m/z = 79. The detection limit ($3\sqrt{B}$) for Br is in the range 2-5 ng/mL. A method is given for automatic correction of the argon contribution at m/z = 81. Data are presented which show that the isotope ratio 81Br/79Br can be measured routinely with a precision (relative std. derivation) of 1% or better. The measured ratio is independent of the Br concn. in the range 3-20 μg/mL. Linear regression equations are obtained for stable isotope calibration graphs over the range 0.997-5.322 (MIR81/79). However, the slopes of these plots deviate considerably from the expected value of one. Two chem. sepn. schemes are described, Scheme I, based on cation exchange and Scheme II, based on distn. from acidified solns. The former is applicable to plasma (and possible saliva) samples whereas the latter is successful for urine. The presence of large amts. of sulfate produces significant enhancement of the ion intensity at m/z = 81 (due to 32S16O31H+). Distn. permits the required sepn. of Br from sulfate, whereas pptn. with Ba(NO3)2 does not appear to be satisfactory. Application of the method of std. addns. and stable isotope diln. anal. to samples of **urine** from several subjects indicates that this method permits **quant. anal.** of **bromine** to be carried out with a precision (and accuracy) of about 2%.

L19 ANSWER 149 OF 257 CA COPYRIGHT 2003 ACS

AN 101:20105 CA
TI Rapid determination of halogens in blood serum by instrumental neutron-activation analysis
AU Lavi, Nathan; Alfassi, Zeev B.
CS Soreq Nucl. Res. Cent., Yavne, Israel
SO Analyst (Cambridge, United Kingdom) (1984), 109(3), 361-3
AB The abs. concns. of Br and I in blood serum were detd. by epithermal neutron activation followed by high-resoln. γ- and x-ray spectrometry. The concns. of Br and I were 6.66 μg/mL and 88.8 ng/mL, resp., and the detection limits were 37 and 15 ng/mL, resp. These methods were compared with thermal neutron activation of Br, a long delay being required for γ-ray spectrometry and the use of a magnet for x-ray measurements. For I, a preliminary chem. sepn. is imperative.

L19 ANSWER 152 OF 257 CA COPYRIGHT 2003 ACS
AN 100:64112 CA
TI Test for esterase activity in a liquid sample
IN Skjold, Cristopher A.; Stover, Lonnie R.; Trimmer, Robert W.
PA Miles Laboratories, Inc. , USA
SO Eur. Pat. Appl., 20 pp.
PI EP 94554 A1 19831123 EP 1983-104371 19830504
US 4499185 A 19850212 US 1982-378895 19820517
PRAI US 1982-378895 19820517
AB A compn. and procedure for the colorimetric detection of leukocytes (detected as esterase or esterase-like activity) in liq. test samples is described. Thus, a 0.2-cm-square filter paper, impregnated with indoxyl-N-tosylalaninate (chromogenic ester) and n-decanol, was dipped in a pyrophosphate buffer soln. (ppt 8.6) to which Bio Terge AS-40 (0.2 mL/dL) was added. The soln. was then made 10 mM in K ferrocyanide and 50 mM in 3-quinuclidinol (added to decrease enzyme reaction time). After dipping, the filter paper was dried at 80° for 35 min. It was dipped a 2nd time in a soln. contg. (in acetone) 0.2 mL/dL n-decanol, 2.0 mL/dL polyvinylpyrrolidone (in MeOH), and 1 mM 3-(N-tosyl-L-alanyloxy)indole. After drying at 60° for 7 min, the resultant carrier matrix was mounted on a polystyrene strip to form a test device. The presence of leukocytes in contrived urine samples was detected by this device.

L19 ANSWER 155 OF 257 CA COPYRIGHT 2003 ACS
AN 98:122334 CA
TI **Determination** of **bromine** in blood **serum** by epithermal neutron activation analysis
AU Alfassi, Zeev B.; Lavi, Nathan
CS Dep. Nucl. Eng., Ben-Gurion Univ. Negev, Beer-Sheva, 84121, Israel
SO Analytical Chemistry (1983), 55(4), 796-7
AB The abs. concn. of Br in human blood serum was detd. by epithermal neutron activation followed by high-resoln. γ- and x-ray spectrometry to be 6.66 μg/mL. The detection limit for the 617-keV γ-peak and for the Kα + Kβ of Br were 37 and 46 ng/mL, resp. These methods were compared to thermal neutron activation in which a long delay is required for γ spectrometry and the use of magnet is needed for x-ray measurement. For fast measurements, the best method is epithermal activation followed by γ-ray spectrometry, whereas for very low concns. a long irradn. together with a long delay is the only possible way.

L19 ANSWER 167 OF 257 CA COPYRIGHT 2003 ACS
AN 94:188071 CA
TI The rapid determination of total bromine and iodine in biological fluids by neutron activation

AU Holzbecher, Jiri; Ryan, Douglas E.
CS Trace Anal. Res. Cent., Dalhousie Univ., Halifax, NS, B3H 4J1, Can.
SO Clinical Biochemistry (1980), 13(6), 277-8
AB Br and I were detd. in whole blood, serum, plasma, and urine by neutron activation anal. without prior sample treatment. The samples (1 mL) were placed in B-shielded irradn. capsules and irradiated for 10 and 30 min for Br and I detns., resp. The detection limits were 19 and 5.7 μg/dL for Br and I, resp., after 10 min irradn. and 14 and 2.9 μg/dL for Br and I, resp., after 30 min irradn.

L19 ANSWER 170 OF 257 CA COPYRIGHT 2003 ACS
AN 94:60911 CA
TI Polarographic determination of bromide at nanomolar levels. Application to the determination of bromide in blood and urine
AU Vallon, J. J.; Pegon, Y.; Accominotti, M.
CS Dep. Chim. Anal., Fac. Pharm., Lyon, 69373, Fr.
SO Analytica Chimica Acta (1980), 120, 65-74
AB Colorimetric methods for bromide detn. lack adequate sensitivity for normal levels in biol. fluids. A sensitive amplification process is recommended: bromide is oxidized to bromate with hypochlorite; after reaction between bromate and excess bromide, the Br formed is extd. into $CHCl_3$ and then reduced to bromide by NH_3; these different steps can be repeated. An a.c. polarog. of bromate allows selective evaluation in biol. fluids. The detection limit is 10-6M and can be reduced to 10-9M with further amplification steps. The effects of iodide and of instrumental parameters are discussed.

L19 ANSWER 177 OF 257 CA COPYRIGHT 2003 ACS
AN 91:71181 CA
TI **Determination** of **bromine** in blood **serum** by neutron activation analysis and x-ray spectrometry
AU Rapaport, M. S.; Mantel, M.; Nothmann, R.
CS Nucl. Chem. Dep., Soreq Nucl. Res. Cent., Yavne, Israel
SO Analytical Chemistry (1979), 51(9), 1356-8
AB A method is described for the nondestructive detn. of Br in blood serum by instrumental neutron activation anal. followed by x-ray spectrometry. The use of magnetic fields for the elimination of the β particles emitted by the blood matrix reduces the background and makes possible the accurate measurement of the Br x rays. An av. value of 7.38 mg Br/L blood serum was obtained for the single person tested.

L19 ANSWER 182 OF 257 CA COPYRIGHT 2003 ACS
AN 90:28266 CA
TI **Bromine determination** in **urine** of persons exposed to methylbromide
AU Momotani, Hiroshi; Sato, Minoru; Morinobu, Shigeru; Ishizu, Sumiko
CS Tokyo Womens Med. Coll., Tokyo, Japan
SO Sangyo Igaku (1977), 19(6), 504-5
AB Twenty four (July, 1975) and 28 (Nov., 1975) workers, exposed to MeBr [74-83-9], were examd. Urine Br correlated pos. with environmental MeBr concn. but not with age and working years. Urine Br concn. of a normal urban control-group averaged 6.5 mg/L with 95% upper confidence limit of 10 mg/L.

L19 ANSWER 206 OF 257 CA COPYRIGHT 2003 ACS
AN 82:67698 CA
TI Clean sensitive and lasting new spot **test** for **paper** and thin-layer chromatograms of perbromate ions
AU Shukla, S. K.
CS Lab. Cromatogr., Cons. Naz. Ric., Rome, Italy

SO Analytical Letters (1974), 7(10), 691-6
AB Benzidine in dil. HOAc reacts with BrO4- to give initially a blue spot which, on further heating, changes to a dark bluish-grey spot on a white background. The color is stable for several weeks and serves as a sensitive test for the detection of ≥10-4M BrO4- on paper and thin-layer chromatograms and electrophoregrams. The reagent can be also used to detect BrO3-, IO3-, and IO4-, as well as free Cl, Br, and I.

L19 ANSWER 216 OF 257 CA COPYRIGHT 2003 ACS
AN 75:72303 CA
TI The x-ray fluorescence **determination** of **bromine** in blood and **urine**. Its application in the diagnosis and treatment of bromide intoxication
AU Boiteau, H. L.; Gelot, S.; Robin, M.; Le Ray, M.
CS Lab. Toxicol. Hyg. Ind., Fac. Mixte Med. Pharm., Nanes, Fr.
SO Annales de Biologie Clinique (1971), 29(2), 163-71
LA French
AB This paper reports the application of x-ray fluorescence spectrometry to detn. of Br in biol. materials. The addn. of cellulose powder to evapn. residues from blood or urine confers the needed resistance on pellets prepd. from these residues and used for the anal. The technique may not be used for urine contg. sugar or albumin. The level of detection of Br is 1.0 mg/100 ml in blood and 0.15 mg/100 ml in urine. Confidence limits range from ±1.3 to ±6.9% for blood and from ±2.4 to ±7.8% for urine. The practical application of the method is illustrated by an account of changes in blood and urine Br levels in a patient suffering from Br poisoning and treated by NH4Cl.

L19 ANSWER 217 OF 257 CA COPYRIGHT 2003 ACS
AN 75:59609 CA
TI Colorimetric **measurement** of **serum** bromide with a **bromate**-rosaniline method
AU Goodwin, Jesse F.
CS Sch. Med., Wayne State Univ., Detroit, MI, USA
SO Clinical Chemistry (Washington, DC, United States) (1971), 17(6), 544-7
AB A procedure is presented for measuring bromide in serum filtrates, after protein has been pptd. with a HCl-tungstate reagent. The bromide in the filtrate is oxidized to bromate with hypochlorite. The resulting bromate reacts with added bromide to release bromine. Bromine reacts with rosaniline to form bromorosaniline, which is measured colorimetrically. The method is specific, sensitive, and reproducible. Bilirubin and Hb do not interfere appreciably with the procedure, and iodine interference is negligible if less than 80 mg is present per 100 ml. Various factors affecting the sensitivity of the method were studied. Preliminary data on the estn. of bromide in urine are also presented.

L19 ANSWER 218 OF 257 CA COPYRIGHT 2003 ACS
AN 75:47529 CA
TI **Adulterants** in bread. Identification of **potassium bromate**
AU Pregnolatto, Waldomiro; Chahin, Cecy M. T.; Sabino, Myrna
CS Inst. Adolfo Lutz, Sao Paulo, Brazil
SO Revista do Instituto Adolfo Lutz (1970), Volume Date 1969-1970, 29-30, 45-9
LA Portuguese
AB A method was developed to detect bromate and other oxidizing agents in flour, bread, baking products, yeast, and baking powder by means of paper chromatog. using 1:3:1 BuOH-Me2CO-aq. NH3 as a solvent and KI as developing agent. The Rf values of a series of ions were given as follows: BrO3-, 0.54-0.64; ClO3-, 0.75; IO3-, 0.20; CrO42-, 0.11; S2O82-, 0.60; MnO4-, 0.

L19 ANSWER 221 OF 257 CA COPYRIGHT 2003 ACS

AN 74:85804 CA
TI Bromine in blood and in serum
AU Cabanis, J. C.; Bonnemaire, J. P.
CS Lab. Chim. Anal. Toxicol., Fac. Pharm., Montpellier, Fr.
SO Travaux de la Societe de Pharmacie de Montpellier (1970), 30(1), 61-8
LA French
AB A colorimetric method using phenol red was adapted for measuring serum and whole blood Br. Whole blood samples (48) had an av. Br concn. of 2.14 mg 1/l. (range 1.24-3.46). Serum samples (29) had a mean Br concn. of 2.13 mg/l. (range 0.62-5.2).

L19 ANSWER 236 OF 257 CA COPYRIGHT 2003 ACS
AN 60:48435 CA
OREF 60:8546c-d
TI Detection of toxic gases using an automatic recording paper tape air sampler
AU Gelman, Charles; Young, Robert M.
CS Gelman Instr. Co., Chelsea, MI
SO ISA (Instr. Soc. Am.), Proc. Natl. Anal. Instr. Symp. (1962), 8, 179-82
AB The Phototape Sampler consists of a tape sampler unit with a vacuum pump and a densitometer unit with a miniature strip-chart recorder. Each unit measures 9 × 9 × 10 in. and weighs about 25 lb. Dry **test-paper** tapes have already been developed to detect ozone, SO2, H2S, phosphine, phosgene, arsine, stibine, Hg, CO, methyl bromide, HCN, Cl2, Br2, and I2. A typical analysis is in the range of 0.1 p.p.m. for a 100-l. sample to tolerances of ±10%.

L19 ANSWER 240 OF 257 CA COPYRIGHT 2003 ACS
AN 57:24463 CA
OREF 57:4957h-i
TI Toxicological determinations in urine
AU Sperling, Elke
CS Hosp. Dresden-Friedrichstadt, Germany
SO Aerztliche Laboratorium (1961), 7, 384-8
LA Unavailable
AB Brief descriptions for the detection of alkaloids extractable with acid alc., As, Br, quinine, MeOH, salicylic acid, phenacetin, antipyrin, cresols, I, CHCl3, and formaldehyde in urine are given.

L19 ANSWER 245 OF 257 CA COPYRIGHT 2003 ACS
AN 50:66180 CA
OREF 50:12328h-i
TI Bromine number and Maumen.acte.e number of Yugoslav edible oils
AU Momirovic, Jelena
SO Farm. Glasnik (1956), 12, 137-42
LA Unavailable
AB Br, Maumen.acte.e, and Margosches iodine no., and factors for conversion of Br into iodine no. are given for olive, sesame, rape, soybean, pumpkin, sunflower, and hempseed oils, and their significance for detection of adulteration is discussed.

L19 ANSWER 246 OF 257 CA COPYRIGHT 2003 ACS
AN 50:23404 CA
OREF 50:4718e-f
TI **Detection** of **bromate** ion by use of manganese salts
AU Fukamuchi, Hisao; Obata, Sachiko
CS Tokyo Coll. Pharm.
SO Bunseki Kagaku (1955), 4, 25-6

AB Detection of BrO3- in the presence of ClO3- with Mn++ was not satisfactory because Mn++ was also oxidized by ClO3-. The proposed method was to detect Br liberated by the above reaction. Five drops of sample were heated with 1 drop 25% HNO3 and 1 drop 10% Mn(NO3)2 and the evolved vapor was tested with fluorescein or fuchsin-bisulfite **test paper**.

L19 ANSWER 249 OF 257 CA COPYRIGHT 2003 ACS
AN 47:2861 CA
OREF 47:445c-d
TI Rapid detection of anions that yield volatile products in acid solutions
AU Saredo, Juan F.
CS Facultad quim. farm., Montevideo
SO Anales asoc. quim. farm. Uruguay (1951), 51(No. 2), 68-80
AB Group (1), above, was studied with reagent **test papers**. Paper for the nitrite test is treated with Ilosvay Ilosva reagent (sulfanilic acid and α-naphthylamine). "Redox" paper contains I, KI, and starch. A table of incompatible ions serves as a guide in the analysis.

L19 ANSWER 251 OF 257 CA COPYRIGHT 2003 ACS
AN 43:22895 CA
OREF 43:4324d-e
TI **Detection** of **bromate** in blood and **urine**
AU Dunn, A. L.; McIntyre, A. R.
SO Journal of Laboratory and Clinical Medicine (1949), 34, 425-7
AB To 2 ml. of plasma or urine, add 1 ml. of 4 N HCl. Centrifuge. Add 0.1 ml. of 0.01% aq. soln. of Evans blue. Immediate fading of the blue color indicates the presence of bromate at a level of 1 mg. % or more. Nitrite interferes but may be removed by the addn. of 0.25 g. of urea.

L19 ANSWER 256 OF 257 CA COPYRIGHT 2003 ACS
AN 7:6644 CA
OREF 7:956i,957a-c
TI The New Guareschi Reaction for **Bromine** Employed in the **Detection** of **Bromates** in Potassium Chlorate
AU Nicola, Francesco
SO Giorn. farm. chim. (1913), 61, 538-40
AB cf. preceding abstr. To apply Schiff's reagent in detection of Br in presence of other halogens, N modifies the same to **det. bromate** in KClO3. The reagent is rosanaline-HCl 1 g., H2O 1000 cc., NaHSO3 6 g., HCl (conc.) 15 cc. The detn. may be made by calcining in porcelain crucible 5 g. KClO3, treatment of this with 5 cc. of 25% CrO3, and warming slightly. A **test paper**, satd. with the moist Schiff reagent, and suspended over the warm liquid, will become colored an azure violet; or, a direct method may be employed by dissolving 5 g. KClO3 in 100 cc. H2O. To 20 cc. (representing 1 g.) add a few drops of the fuchsin reagent. Agitate, and after a short time compare the characteristic azure-violet coloration. N. found bromates in all forms of KClO3, even Kahlbaum. KClO3 pro analisi. To obtain chlorate free from bromate, it will be necessary to prepare it by action of Cl gas on KOH, or by treating an aq. soln. of chlorate containing bromate with H2S, which will not affect the chlorate but will reduce the bromate to the bromide, with a deposition of S. Owing to ready solubility of bromide, that may be gotten rid of through repeated crystn.

L19 ANSWER 257 OF 257 CA COPYRIGHT 2003 ACS
AN 2:10759 CA
OREF 2:2398h-i
TI **Detection** of **Bromine** in **Urine**
AU Labat

SO Repert. pharm. [3] (1907), 20, 74 From: Bull. soc. pharm. (Bordeaux)
AB The urine is treated with silver nitrate and the precipitate filtered, washed and then reduced with H. The solution is then filtered and the filtrate acidified and distilled after adding 10 drops of sat. K2Cr2O7 solution. 0.1 cc. of alcoholic fluorescein produces a beautiful eosine coloration in the distillate if bromine is present.

=> log y
STN INTERNATIONAL LOGOFF AT 09:34:28 ON 30 JUN 2003

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	385	436/124-126.ccls.	USPAT	2003/06/30 11:46
2	L2	59	1 and (br or br2 or bromine or nabro$ or kbro$ or bromate or bro3 or bro adj "3")	USPAT	2003/06/30 11:48